

US010645991B2

(12) United States Patent

Vock et al.

(54) UNITLESS ACTIVITY ASSESSMENT AND

(71) Applicant: Apple Inc., Cupertino, CA (US)

ASSOCIATED METHODS

(72) Inventors: Curtis A. Vock, Boulder, CO (US); Perry Youngs, Longmont, CO (US)

(73) Assignee: APPLE INC., Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 16/525,875

(22) Filed: Jul. 30, 2019

(65) Prior Publication Data

US 2019/0350306 A1 Nov. 21, 2019

Related U.S. Application Data

- (63) Continuation of application No. 15/972,959, filed on May 7, 2018, now Pat. No. 10,376,015, which is a (Continued)
- (51) **Int. Cl. G08B 13/19** (2006.01) **A43B 7/00** (2006.01)
 (Continued)

(10) Patent No.: US 10,645,991 B2

(45) **Date of Patent:** *May

*May 12, 2020

(58) Field of Classification Search

CPC A63F 1/06; A63F 1/067; A63F 1/10; A63F 1/12; A63F 1/14; A63F 2250/58;

(Continued)

(56) References Cited

U.S. PATENT DOCUMENTS

(Continued)

FOREIGN PATENT DOCUMENTS

DE 10325805 A1 1/2005 EP 0336782 A2 10/1989 (Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 09/992,966, Notice of Allowance dated Sep. 3, 2004. (Continued)

Primary Examiner — Daniel Previl (74) Attorney, Agent, or Firm — Van Court & Aldridge LLP

(57) ABSTRACT

A system assesses activity and displays a unitless activity value. A detector senses activity of a user. A processor reads sensed activity data from the detector. A display displays the unitless activity value. An enclosure houses the detector and the processor. The processor periodically reads the sensed activity data from the detector and processes the data to generate an activity number, the number being used to generate the unitless activity value based upon a maximum number and a display range.

20 Claims, 9 Drawing Sheets

